Assistant Secretary for Environment, Safety and Health

U. S. Department of Energy
Washington, D.C. 20585

SYNERGY E&H

DOE/EH-0487-2

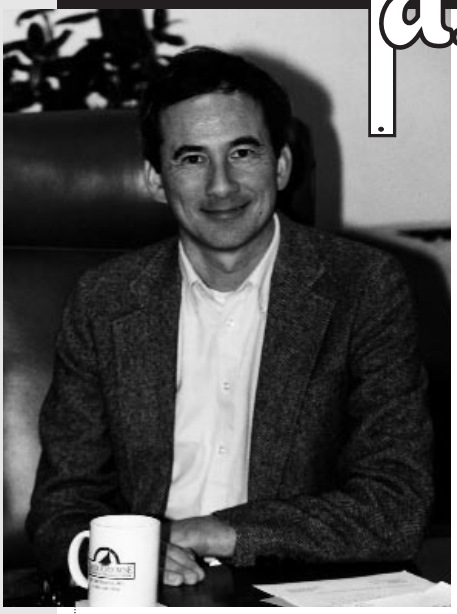
His Mission Accomplished, Secretary Peña Departs DOE

Citing personal and family reasons, Secretary Peña announced during a news conference in early April that he had submitted his resignation, effective June 30, 1998, to the President. He thanked Department personnel for "their hard work, their dedication to our country, and their loyal support," and noted that "we've made important progress in several key areas."

The Secretary specified several accomplishments in the time he's headed the Department ranging from stringent contractor performance requirements, to the development of a Comprehensive National Energy Strategy, to nonproliferation and decontamination and decomissioning efforts and advances in new technologies. He also noted that "DOE is an engine for American technological innovation,"and that "new scientific tools like the National Ignition Facility and the National Spallation Neutron Source will ensure that the U.S. continues world leadership in these areas of science."

In closing, Secretary Peña expressed his pride in the accomplishments of the "extraordinary talented men and women of DOE," thanked them for "their commitment to their work, their love of country and their great efforts," and urged them to "keep focused on our priorities."

Straight Talk with Joe Fitzgerald, Deputy Assistant Secretary for Worker Health and Safety



On May 22, 1998, the *Synergy* staff interviewed Joseph E. Fitzgerald, Deputy Assistant Secretary for Worker Health and Safety, at his office in Germantown, Maryland. Mr. Fitzgerald has been Deputy Assistant Secretary for Worker Health and Safety since 1991 and has initiated and implemented a number of programs directed toward ensuring worker safety across the Complex. He began his career at DOE as a health physicist in the 1980s and has served the Department in a number of capacities in the Office of Environment, Safety and Health, including Special Assistant to the Assistant Secretary and Director of Safety Policy. He also was Director of the Performance Assessment Division of the Department's Office of Nuclear Safety. Mr. Fitzgerald's commitment to identifying and addressing safety issues at the Department's sites is reflected in his cogent responses to the questions posed in this interview.

Q: What role do you believe a DOE corporate-level Office of Worker Health and Safety should play in the Department?

ANS: I think that's a question that has been looked at for several years now; particularly with the prospect of external regulation on the horizon. Actually, a couple of years ago, the Working Group on External Regulation tasked me with coming up with ideas for a corporate safety model that could be established in DOE. That model, which was published in the External Working Group's report and presented to Secretary O'Leary in December 1996, looked toward an internal organization that addressed missions and functions similar to those of some of the larger multinational corporations. These would include, certainly, internal corporate policy and guidance, collaborative program quality assurance audits with the field, and technical assistance much as we do now for the Department. So a lot of things we are doing now in this Office would be very similar to what we would effectively do in the future. The model also calls for an orga-

Continued on page 3

In this issue . . .

ES&H SYNERGY

ES&H Synergy is a quarterly newsletter published by DOE's Office of Environment, Safety and Health (EH) to promote awareness and information exchange of all environment, safety, and health issues impacting DOE personnel and contractors. Each issue highlights Headquarters and field initiatives in environment, health physics, nuclear and facility safety, occupational medicine, and occupational safety and health. To be added to the distribution list or to receive a copy of this publication, call 1-800-473-4375. Synergy is also available electronically through Technical Information Services at http://tis.eh.doe.gov/docs/synergy/synergy.html.

EXECUTIVE EDITOR
R. Stephen Scott (EH-72) • (301) 903-3033
MANAGING EDITOR
Mary Cunningham (EH-72) • (301) 903-2072
COORDINATING EDITOR
Cathy Brown • (301) 972-3169
GRAPHIC DESIGNER
Patti Sygeel • (301) 601-4910

ASSOCIATE EDITORS
Oversight:
Len Lojek (EH-23) • (301) 903-2033
Nuclear and Facility Safety:
Jim Snell (EH-33) • (301) 903-4094
Environment:
Barbara Grimm-Crawford (EH-4) • (202) 586-3964
Worker Health and Safety:
Eleanor Crampton (EH-51) • (301) 903-3732
Ron Eimer (EH-51) • (301) 903-2927
Health Studies:
Marge Lentzen (EH-61) • (301) 903-7385

nization that would be somewhat smaller, and more focused on critical information flow in terms of keeping everybody informed on safety issues, performance trends, and other topics. Most safety and health corporate organizations focus on how the overall company is doing in safety and health—especially how it is doing in identifying problem areas. So we see that model as fitting DOE very well, and it is something to which we would probably evolve as external regulation becomes a reality.

Q: What is the status of external regulation by the Occupational Safety and Health Administration (OSHA), and how will external regulation impact the corporate role you've just described?

ANS: We just completed two hearings before Congress this week [May 20 and May 21] on the overall subject of external regulation transition. The present status is that the Secretary has mandated a pilot-based transition to external regulation, meaning that the goal is to transition the Department to external regulation but to do it in such a way that we test-out the viability, feasibility, and affordability of externally regulating parts of the Complex. We would transition those operations and activities for which external regulation is cost-effective and for which the value is established. The Deputy Secretary announced yesterday [May 21] that the single-purpose, non-defense energy research laboratories appear to be the best candidates for near-term transition to external regulation by the Nuclear Regulatory Commission [NRC] and OSHA. That's an important decision. Other parts of the Agency will also be considered for transition once it's clear that the feasibility and cost-effectiveness are there. So that's where we stand right now.

In terms of the impact on the corporate role for this Office, I think it will be relatively small. For the near term, we will have a lot of activity in support of the DOE transition to external regulation of worker health and safety. We have a large role to play over the next few years in facilitating that transition and in supporting the field in its transition. Once we are fully externally regulated and stable, our role would likely shift to more of a regulatory liaison function. We would interact with the Washington regulatory agencies to support the operating units and field offices that will be dealing with the external regulation standards, actions, and reporting. So I see a very active period during transition, as well as following it, for corporate safety functions.

Q: How is your Office involved in the Department's Integrated Safety Management (ISM) initiative?

We've been very much involved in the ISM initiative. This Office has been very active in developing safety management tools in collaboration with the field. Enhanced Work Planning [EWP] is an initiative we started about 4 or 5 years ago. It is a process of re-engineering the way safety and health are addressed in routine work planning for various types of hazardous operations. Work planning has been accepted as a key component of ISM. So, from that standpoint, we were already in a very good position, as was the field, to have a very workable EWP process to support ISM. We have proven tools available.

A few years ago, when ISM was first committed to, we also made a decision to start working on the question, "How does one provide self-assessment?" Self-assessment, or performance "feedback," is a key element of ISM. We benchmarked successful private corporations that have very mature and effective safety performance feedback mechanisms and from those benchmarks established an approach that would work in the field to perform self-assessments and handle feedback more effectively. Again, here is a tool that we've worked on for a couple of years now that will serve to make ISM implementation more effective. So, really our role over the past couple of years has been to develop the management tools that are important to ISM.

I might add that when the field office managers convened with the Secretary a few weeks ago to roll out Secretary Peña's initiative on safety management, there was wide recognition of the value of the Voluntary Protection Program [VPP] in providing that key component of worker participation that is necessary to make ISM successful. That, of course, is a program that's now in its sixth year of implementation, and we feel that it is a major element in making ISM successful in the field and in recognizing various DOE contractors who achieved demonstrated excellence in worker health and safety.

Q: Has Secretary Peña's resignation impacted ISM and your Office's efforts?

ANS: In terms of the Secretary's imminent departure, I think that his legacy on safety management will be his recently announced policy statement that the Department has adopted a "no tolerance" policy on accidents and that solid safety management is a fundamental expectation for doing business with the DOE. ISM is, in fact, the integral way to accomplish this, and it will be his legacy.

Q: Could you predict at this time whether the initiatives to enhance the radiation dosimetry programs across the DOE complex will be as successful as you anticipated?

ANS: It's always difficult to predict how fast such programs will evolve, but we believe that this upcoming expansion of what is called the Radiation Dosimetry Accreditation Program, which will encompass internal uptakes—what we call bioassay programs—is going to be very important. We have a number of problems and issues at some field locations where we have identified what I would call "quality control problems" in the way we measure internal uptakes. Unlike external dosimetry, measurement of internal uptakes of radioactive materials is less established, less mature, and requires a lot more vigilance from the standpoint of quality control. Uniformly applying these standards is a very important thing; one that will help us, perhaps, to avoid a serious mishap. So I am very bullish on the Bioassay Accreditation Program that is to be inaugurated this year and think it is going to make a fundamental difference to the quality of our measurements in this area. Now, I might add this is not a panacea for the various problems that have plagued DOE in this area. We still are going to have to look to line management for oversight and good program management. And, we need to give it high priority and ensure that lessons learned are shared. This program of accrediting the quality of the measurement is only one element, but it's an important one.

Q: What is the status of the beryllium initiative?

ANS: First of all, beryllium is uniquely a DOE hazard because beryllium is a major component of nuclear weapons. In fact, the Atomic Energy Commission was the first agency to establish a

Continued on page 4

Straight Talk with Joe Fitzgerald continued from page 3

health and safety standard for beryllium. What we've learned over the last 10 years, however, is that beryllium has a chronic effect as well as an acute effect and, although the standard that was established was adequate for the acute effect, it has proven not to be sufficient for the chronic effects. These chronic long-term effects have been becoming more evident over the past 10 years in the individuals who have worked with beryllium. The health problems are largely pulmonary—shortness of breath and conditions associated with impaired lung capacity—and are serious and debilitating. It became clear that the internal steps that had been taken in the past at DOE sites have not been sufficient. Last year Secretary Peña signed an internal policy that established more stringent procedures in terms of protecting workers potentially exposed to beryllium. At the same time, the EH Office of Health Studies inaugurated a number of medical surveillance and epidimiology studies to more thoroughly establish the scope and extent of beryllium exposure in both our current and former work population.

When the Secretary issued the internal policy, he asked for a rulemaking initiative on beryllium that would be a more permanent, more formal position on required practices for worker safety associated with beryllium exposure. We have since—through a lot of interaction with the field, with OSHA, and with industry—developed a Notice of Proposed Rulemaking that will enable Secretary Peña to announce an approach to protecting workers from beryllium exposures. We are hopeful that it will receive public comment and scrutiny that will put us in a position with the next Secretary to issue a formal rule by the end of this year. So that's where we stand right now.

I might add that beryllium has been accorded unprecedented attention by this Administration. The Beryllium Rulemaking Advisory Committee established by Secretary Peña last fall is indicative of the steps that are being taken to focus attention on this health issue. We've also issued guidance for beryllium care worker compensation. Finally, I'd like to note that a series of workshops and meetings, conducted with practitioners and the public, are to be held; the next one is at Argonne on June 1, 2, and 3. We hope to share experiences and information on beryllium in that forum.

Q: To what do you attribute the recent trends in safety performance as reflected in the latest Performance Indicator System (PIDS) reports?

ANS: First, the performance trends for occupational safety and health are favorable. We have seen a progressive decline in some of the more significant parameters in safety performance. There has been a significant decline in terms of serious injuries, and we've seen overall cases decline. I would attribute this to the greater awareness and attention being given by our contractors and subcontractors to occupational safety and health. It's been 8 years since we first established a priority program in occupational safety and health, but I think in the last 3 or 4 years there's been greater attention and vigilance in this particular area. In my opinion, this can be attributed to the historic higher attention that went to nuclear safety and radiation protection, which were seen as a higher priority than the more conventional worker safety hazards. With the advent of the cleanup program and increased recognition that we have much higher costs that seemed to be tied to poor occupational safety and health performance, I think managers have gotten the word and are a lot more aggressive on these more conventional safety concerns. They are taking steps such as being more aggressive on tracking of injuries and illness, taking safety initiatives at the local level, and participating in the VPP program. All of these, I think, have contributed to the decline that we are seeing.

However, I think there is considerable room for improvement. I think that we have some sites that have contributed to these improving trends, while others seem to be at a plateau in overall site improvement. So I think we still have room for improvement—both for the sites that haven't improved much and those that have. That's where I think the VPP comes in because you benchmark your performance against model programs in industry. On the radiation protection front, we've actually seen some increasing trends in radiation doses for workers that we have linked to the increase in operations or activities that have a lot more potential for low-level exposures. The impact is on exposing greater numbers of workers, not on higher individual doses. There is now a larger number of workers involved in cleanup, and with cleanup you have the potential for radiation exposure to a much larger group of people. In the past, you had the same workers across the complex working on the same jobs, as opposed to introducing new workers and a shifting environment with new jobs. We predicted that we would likely see more exposures, and we are seeing that trend now. So our efforts are directed at working with the field to continue a strategy to keep exposures as low as reasonably achievable for those types of operations while continuing to ensure that workers are sufficiently trained to reduce the potential for exposure.

Q: We understand that the VPP is making much progress. Could you tell us about it efforts and explain what in your opinion is making VPP successful?

ANS: VPP works! Historically, it has achieved results where many other safety programs have not. VPP is founded on five key principles: management commitment; worker involvement; worksite worker training and hazard prevention; and hazard analysis and control. It is very much the "gold standard" for workplace safety performance in commercial industry. This is their mark of excellence for occupational safety and health, and the program that we established 6 years ago at DOE is essentially that same program. We are members of the VPP Participants' Association, where we participate and share experiences with our commercial colleagues; and we are also very close, to OSHA. Our contractors know that when they participate, and achieve recognition in the VPP programs, they are standing shoulder to shoulder with world class companies that have achieved high quality safety. I think this is very important. There are very few benchmarks that have that kind of meaning and significance. It also is a very structured program that emphasizes those elements of safety performance that demonstrate over and over again their importance in achieving safety goals and results. In particular, worker participation, which is empowering your workforce to manage safety more effectively, is something that has grown in recognition across DOE. This is where safety begins; this is what makes safety work; and, it provides a vehicle to actually strive to achieve improved worker participation in safety. I might also add that VPP shares a lot of the key elements of ISM, such as hazard identification analysis, training, and other key elements that are transferrable to ISM, so a lot of sites see VPP as a way to effectively address ISM.

Q: Could you share your plans to communicate your Office's worker safety and health message to DOE sites?

ANS: Let me say first that we just went through a strategic planning exercise for the Office, and communication was one of the four goals that were identified as a key direction for the Office

over the next couple of years. We felt very strongly that we need to enhance our communications internally in terms of being more fully aware of information and performance trends and regulatory developments from the outside and bringing them inside. But more importantly, we want to be in a position to serve the line programs of DOE with the right information for the right audience and to be a way-station for worker safety information in terms of what they need to do their jobs. This would be something we would do in concert with other DOE elements that also have pertinent safety and health information.

We feel the professional resources in this Office make us a particularly good provider of useful information and safety management tools that will positively impact safety management at DOE. We will be working with our customers—the field offices and line program offices—to establish what information they find useful—whether it's regulatory information or new management tools, developments taking place outside DOE, or technical practices that will serve their needs.

Q: What impact has the DOE Technical Qualification Program had on our environment, safety, and health performance?

ANS: Frankly, I think it's too early to tell. The process of identifying qualifications and guaging where DOE personnel stand in terms of them has, I think, been accomplished. In terms of enhancing qualifications and providing training, that effort is underway. So I think it will take several years to guage the results and benefits of this program and to see how effective it is. Efforts are still under way to identify whether people have the right qualifications for certain roles and jobs. So the jury is still out. However, I believe it to be a very important challenge to DOE, and it is certainly given a premium by the Defense Board and others.

Q: What are you thoughts about DOE's safety initiatives and programs as we move into the next century?

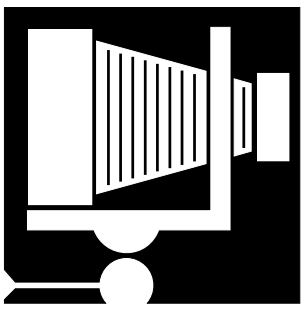
ANS: Well I think we have some real challenges, and I'll just touch on some of them. I think that safety management from the corporate standpoint will be a challenge certainly for DOE and for my Office as well. I think that ISM is the right way to go and that we've identified improvements and implemented a strategy to accomplish safety in a practical and pragmatic way. But, we are at the stage of "putting rubber to the road" in terms of actually making improvements and actually addressing behavioral issues in terms of how we address safety by the individual workers and managers involved. So, here again, I think we've done a lot of work to define what safety management should be and to evaluate where we stand; but now we have to actually make it happen and, where necessary, make demonstrable improvements. So I think we are at a very crucial juncture on that issue.

Another challenge is to make an effective transition to external regulation by OSHA and the NRC. We have done a lot of the homework, but it's pretty clear to me that some degree of the transition will occur in the near future, if only for the aforementioned DOE energy research laboratories. That's going to be a very dramatic change for DOE. I think that people will be challenged to assure that we have a very effective framework for external regulation and an effective relationship with the regulators. But also, we must assure that we don't lose any of the momentum on internal safety management improvements because most of the progress that must be achieved in terms of safety management is not going to be fostered solely by external regulation. In fact, the external regulators have made it clear that external regulation does not involve ensuring that sites are safely managed. Managers will still need to apply the resources and management attention and scrutiny that is required. So, it will be a challenge during the transition to preserve the gains we've made and add to them.

Another imperative is that we need to continue to reach out to the private sector to ensure that there continues to be very vigorous information flow and experience sharing. I think we've done a lot, and we need to do more. The Department had an unfortunate history of insularity during the Cold War, when, because of secrecy and what not, we did not keep pace with industry and did not share with industry. I think that is a very key need—to assure that we learn from them and from each other and keep pushing the envelope on safety performance. The Atomic Energy Commission was perceived as a leader in safety at a time when OSHA and NRC didn't exist, and we effectively innovated the original safety precautions for nuclear radiation and hazardous materials. I think we need to recapture that legacy. DOE can, in fact, occupy a safety and health leadership. It's a matter of commitment and keeping pace with accepted safety management and technology.

Q: Do you have anything you'd like to tell Synergy readers across the Complex?

ANS: What I would add is that frankly I've enjoyed the role that we in this office have played in safety and health. It has been a very invigorating experience collaborating with safety and health professionals, both with DOE and its contractors, and engaging the outside world to bring about meaningful improvements in the way workplace safety is viewed and addressed. It has taught me a lot, and we've had an opportunity to team with many, many different parts of the national safety arena. And, I think we've made a significant step into the future of DOE. I am looking forward to the challenges coming up and to a continued working relationship with our partners, both inside and outside of DOE.



Attention Photographers!

If you are interested in submitting photographs to complement your articles in the Synergy newsletter, please note the following technical requirements needed to ensure quality production! **Color or black and white photos or digital camera photo files shot at 233dpi or higher (72 dpi jpegs do not reproduce well).** When taking photos, aim for high contrast, focused prints with interesting subject composition. For further information contact Patti Sygeel, Graphic Designer, (301) 428-2891.

Environmental Protection Agency Interim Policy on Monitored Natural Attenuation

The Environmental Protection Agency (EPA), Office of Solid Waste and Emergency Response (OSWER), has issued an interim final directive clarifying EPA policy on the use of monitored natural attenuation in remediation activities. The directive, Use of Monitored Natural Attenuation At Superfund, RCRA Corrective Action, and Underground Storage Tank Sites, Directive 9200.4-17, was made available to the public in November 1997. Although the directive is in interim final form, it is intended for immediate use as guidance for applicants to propose, and regulators to evaluate and approve, monitored natural attenuation remedies. The EPA will issue the directive in final form after reviewing all comments submitted on the interim form.

Deciding to Use Natural Attenuation

Natural attenuation may be one element of a multifaceted remedy or, in some limited cases, a sole remedy at sites that have a low potential for plume generation and migration. Sites with contaminants that are easily remediated through natural processes and do not transform into more or equally harmful transformation products are also good candidates for natural attenuation.

It is important to note that monitored natural attenuation is not to be considered a "no action" option to the remedial problem. Neither is it to be considered a "presumptive" or "default" remedy. It is one option that should be considered along with other potential remedies.

Monitored natural attenuation would not be a good option for sites with complex geologic systems that could impede adequate, cost-effective monitoring of the success of the natural attenuation process in achieving remediation goals. Nor would it be a reasonable choice if other remedial activities, such as source control (which EPA considers a fundamental element of any monitored natural attenuation remedy), altered site conditions sufficiently to interfere with the natural attenuation process.

The potential advantages of using natural attenuation as a remedy or remedy component include the following:

- reduced volume of remediation wastes
- reduced risk of human health exposure to contaminated media
- minimized intrusion since fewer surface structures are required
- lower remediation costs

The possible disadvantages of natural attenuation that must also be taken into account when considering its use are the following:

- longer remediation timeframes
- more complex and costly site characterization
- transformation products that may be more toxic than parent compounds
- long-term monitoring and institutional controls generally necessary
- possibility of continued contamination migration or cross-media transfer of contaminants
- less acceptable to the public initially

Using Monitored Natural Attenuation

The utilization of natural attenuation relies on naturally occurring physical, chemical, or biological processes to achieve site-specific remedial objectives. Natural attenuation processes reduce the risks presented by contaminants in three ways:

(1) Contaminants are converted to a less toxic form through destructive processes such as biodegradation or abiotic transformation.

(2) Contaminant concentration levels are reduced either by destructive processes, dilution, or dispersion, thereby reducing potential exposure levels.

(3) Contaminant mobility and bioavailability are reduced by sorption to the soil or rock matrix.

The EPA considers monitored natural attenuation to be an acceptable remediation method only when it will be adequately protective of human health and the environment, and is capable of meeting site-specific remediation goals within a timeframe considered reasonable compared to more active remediation alternatives. Thus, proponents of the use of monitored natural attenuation at a site must:

- Present sound technical analysis to demonstrate its ability to achieve remediation goals in a reasonable timeframe.
- Develop and implement performance monitoring to evaluate its effectiveness.
- Formulate backup or contingency remedies as appropriate.

Technical Analysis Required to Support Use of Monitored Natural Attenuation

The EPA cautions that the site characterization required to support the use of monitored natural attenuation must be more detailed than that needed for active remediation methods. Because the efficacy of natural attenuation is dependent upon thorough quantitative knowledge of both the source mass and natural dynamic processes (i.e., groundwater flow characteristics, role of biological, chemical, and physical transformations, etc.), the technical analysis required to support its use will generally need to be based upon a detailed conceptual site model. This three-dimensional representation must convey what is known or presumed about the sources, release mechanisms, and fate and transport of contaminants. The technical analysis must also include information on how active remediation methods proposed for the site will affect natural processes and therefore affect natural attenuation.

Once site characterization data have been collected and a conceptual model developed, the efficacy of monitored natural attenuation should be evaluated. The evaluation should consider any of the following types of information:

- Historical information on groundwater and/or soil chemistry data demonstrating a clear and meaningful trend of decreasing contaminant mass and/or concentration.
- Hydrogeologic and geochemical information data that can be used to indirectly demonstrate the types of natural attenuation processes occurring at the site and the rate at which they are expected to reduce contaminant concentrations to required levels.
- Field or microcosm information study data directly demonstrating the occurrence of a particular natural attenuation process at a site and its ability to degrade contaminants.

The appropriate Federal or state regulatory authority will evaluate whether historical information alone is sufficient to make a case for the use of natural attenuation or if it must be supplemented with hydrogeologic and geochemical information. If that combined information is still inadequate to support the proposed use of natural attenuation, the regulator will require additional field or microcosm information to be submitted.

Proponents of monitored natural attenuation as a remedy or remedy component will also need to demonstrate that the natural attenuation timeframe will be reasonable compared to active remediation methods. The "reasonableness" of the timeframe for natural attenuation will necessarily be a site-specific determination, taking into consideration the classification of the groundwater resource and uncertainties regarding the nature and extent of contamination, adequacy of funding for monitoring and performing evaluations, and so on. Furthermore, the value of the affected resource and the expectation of when affected portions of an aquifer will be needed for future water supplies must be considered when determining what is reasonable. Additionally, the degree of uncertainty associated with the mass of contaminants in the subsurface, predictive analyses, and the reliability of monitoring and institutional controls through time must be considered. Finally, public acceptability of the predicted timeframe must also be weighed.

Performance Monitoring

The performance monitoring associated with natural attenuation is considered to be even more important than that for more active remediation methods due to the longer timeframes involved, the greater potential for ongoing contaminant migration, and the higher likelihood of uncertainties associated with the use of natural attenuation. The importance of monitoring when implementing natural attenuation systems cannot be overemphasized. For this reason, the EPA consistently refers to "monitored" natural attenuation in the directive in order to make clear how important monitoring is to the approval and success of these systems.

To ensure monitoring is adequate, monitoring plans should be designed to accomplish the following:

- Demonstrate that natural attenuation is progressing according to plan.
- Determine if plume is expanding vertically and/or horizontally.
- Identify any potentially toxic transformation products resulting from biodegradation.
- Verify effectiveness of institutional controls implemented to protect potential receptors.
- Detect changing environmental conditions or new releases of contaminants that could negatively affect the natural attenuation processes occurring.
- Verity achievement of cleanup objectives.

Due to the importance of monitoring, details of the monitoring program should be submitted to regulators as part of the proposal to use a natural attenuation remedy. **Performance monitoring should continue as long as contaminants remain above the required cleanup levels.**

Contingency Remedies

The EPA recommends that contingency remedies be included in remedy plans when natural attenuation is part of the remedy, especially when predictive analyses rather than historical information were the basis for selecting natural attenuation. A contingency remedy is a cleanup technology or approach that acts as a "backup" in the event the selected remedy fails to perform as expected. A contingency remedy can be a technology dissimilar to, or a modification of, the selected remedy.

In addition to the contingent remedy, the remedy plan should also include triggering mechanisms to signal when the contingent approach should be used. Obvious triggers built into the remedy plan would be increased contaminant concentrations and/or migration, indications that contaminant concentrations are not decreasing rapidly enough to achieve remediation goals, and changes in land or groundwater use that could adversely affect the protectiveness of the remedy.

More Information

The directive can be accessed in electronic form through the Internet at the following address: *http://www.epa.gov/swerust1/directiv/d9200417.html.* Paper copies of the directive can be obtained by calling the EPA RCRA, Superfund, OUST & EPCRA Hotline at (800) 424-9346 or DC Area Local (703) 412-9810 or TDD (800) 553-7672 or TDD DC Area Local (703) 412-3323 Monday through Friday between 9 a.m. and 6 p.m. EST.

For further information on the OSWER Monitored Natural Attenuation Directive, contact Hal White, OSWER, at (703) 603-7177, fax (703) 603-9163, or e-mai *(white.hal@epamail.epa.gov);* or Jerry Coalgate, Office of Environmental Policy and Assistance, EH-41, at (202) 586-6075, fax (202) 586-3915, or e-mail *(jerry.coalgate@eh.doe.gov).*

Fernald Team Members Achieve Safe Work Hour Milestone

Fernald team members have exceeded the 1 million safe work hours mark. This achievement is especially significant because of the challenging activities currently underway at the site. "The level of activity is as high or higher than it was during production days,"said Dave Kozlowski, DOE-Fernald Associate Director for Safety and Assessment. This is a positive indicator and shows significant progress. It's a sign of the employees' attention to safety and their working conditions."

Fernald subcontractors have also demonstrated their commitment to safety by working for more than five years without a lost-time accident. "This is only the beginning,"said John Bradburne, Fluor Daniel Fernald President. "Our goal for 1998 is to reach 3.9 million safe work hours, and I am confident the team at Fernald will make that happen."

Safe Shutdown personnel played a big role in helping Fernald team members achieve 1 million safe work hours by completing difficult work safely.

Fernald Union Ratifies Five-Year Collective Bargaining Agreement

In early March, members of the Fernald Atomic Trades and Labor Council (FAT&LC) voted to accept a new five-year collective bargaining agreement with Fluor Daniel Fernald. This contract represents a collaborative effort between FAT&LC and Fluor Daniel Fernald to continue making progress toward accomplishing the mission at Fernald—cleaning up the site in a safe and efficient manner at an accelerated pace.

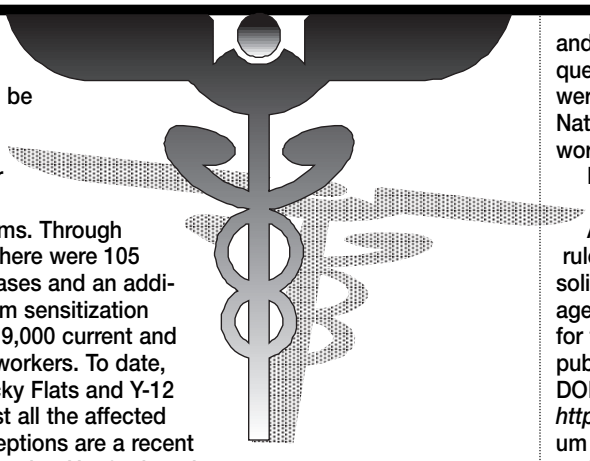
"Members of the Fernald Atomic Trades and Labor Council have the expertise, skills, and institutional knowledge needed to help us complete the Fernald cleanup," said John Bradburne, president of Fluor Daniel Fernald. "Utilization of this knowledge will help us continue to make progress at Fernald."

This joint union/management effort has resulted in a leading-edge example of an agreement that satisfies the dual goals of maintaining necessary skills and talents for project completion, while preparing those who have fulfilled their roles at Fernald for employment elsewhere. "I am pleased we will continue to work together with the Department of Energy and Fluor Daniel Fernald to complete such a complex project," said Bob Schwab, president of FAT&LC. "We are looking forward to the next five years of working safely and efficiently as a team."

This is the first five-year contract approved at any Department of Energy (DOE) site completely dedicated to remediation and could serve as the model for other DOE facilities entering the final stage of cleanup.

(Clockwise from top to right) John Bradburne, President and CEO, Fluor Daniel Fernald; Bob Schwab, FAT&LC, President; Peggy Doherty, Industrial Relations; and Gene Branham, FAT&LC Vice President were present at the signing of the official contract.

Beryllium Worker Health Initiative Moves Forward



Cases of chronic beryllium disease (CBD) continue to be identified as contractors expand and enhance their beryllium worker protection programs. Through the end of 1997, there were 105 confirmed CBD cases and an additional 195 beryllium sensitization cases among the 9,000 current and former screened workers. To date, operations at Rocky Flats and Y-12 account for almost all the affected workers. The exceptions are a recent CBD case diagnosed at Hanford, and one Mound worker who is beryllium sensitized.

DOE Notice 440.1, *Interim Chronic Beryllium Disease Prevention Program (CBDPP),* signed by Secretary Peña on July 15, 1997, is designed to minimize beryllium exposure and the potential for occupational beryllium exposure, reduce the number of exposed workers, and establish medical surveillance guidelines to ensure early detection of CBD. Best practices and lessons learned workshops and meetings were held among the approximately 20 sites that are implementing the Notice. In addition to information-sharing among field and program office managers, technical professionals, and workers, questions regarding the Notice's performance-based requirements were answered. A workshop was held June 2-3, 1998, at Argonne National Laboratory, Argonne, Illinois. Speaker overheads from that workshop will be available at the Department of Energy (DOE) Beryllium Web Site at *http://tis.eh.doe.gov/be/.*

A Federal Rule to replace the Notice is under development. The rulemaking process is both structured and open, with comments solicited not only from DOE elements but also from other Federal agencies and the public. A Notice of Proposed Rulemaking (NOPR) for the beryllium rule will be published in the Federal Register. When published, copies of the proposed beryllium rule will be available on DOE's Beryllium Web Site, and the Federal Register Web Site at *http://www.access.gpo.gov/su_docs/aces/aces140.html.* The beryllium NOPR will include a formal 60-day period for submittal of written and verbal comments. During this same period, DOE will conduct three public forums in Oak Ridge, Tennessee; Denver, Colorado; and Washington, DC. At the forums, attendees may directly provide spoken, on-the-record, and/or written comments to the session moderator.

Informal comments may be submitted via the Beryllium Web Site and will be responded to in a timely manner. For additional information on the beryllium worker protection initiative and the June workshop, contact Ed Patigalia at (301) 903-3972.

New Waste Minimization Prioritization Tool Helps Facilities Identify Chemicals of Greatest Concern

Deciding how limited waste minimization budgets can be most effectively used is a continuing challenge for many facility managers. Currently, it is not uncommon for priorities to be established based on where the greatest cost savings will be achieved or where the largest waste or chemical quantities will be reduced, without consideration of the risk the chemicals present. To help facilities factor chemical risk into their decisionmaking process, the Environmental Protection Agency (EPA) recently released a screening software package titled Waste Minimization Prioritization Tool (WMPT) that ranks chemicals according to their persistence, bioaccumulative, and toxicity characteristics (the PBT criteria), and allows users to add chemical quantity data into the ranking process. The tool helps answers the question: Which wastes are of greatest concern based on the chemicals they contain and potential risks they may pose, independent of how and where the wastes are managed?

Factoring chemical risk into facility waste minimization prioritization planning is becoming increasingly important. In 1993, Congress passed the Government Performance and Results Act (GPRA) as a means of promoting better planning and greater accountability in Federal departments and agencies. Departments and agencies are required by the law to clearly describe their goals and objectives and track their progress toward them. In 1996, EPA's GPRA-based planning, budgeting, and accountability program established a waste minimization objective of reducing (by the year 2005) the most persistent, bioaccumaulative, and toxic compounds in the nation's hazardous waste streams by 50 percent as compared with a baseline year of 1991. EPA also established an objective of reducing hazardous waste streams likely to contain PBT chemicals 25 percent by the year 2000. This activity is intended to serve as a transitional goal that would allow for the transition from a waste stream focus to a chemical focus in waste minimization. EPA plans to use the WMPT in developing the National Waste Minimization Measurement List, which will be used to track national progress toward the reduction objectives.

The WMPT is a PC-based system containing a scoring algorithm that establishes an overall chemical PBT score based on underlying data that reflect the chemical's human health risk potential and ecological risk potential. PBT scores are based on four factors: human toxicity (including cancer and non-cancer effects); human exposure potential (based on persistence and bioaccumulation potential); ecological toxicity (determined by aquatic toxicity); and ecological exposure potential (based on the same persistence and bioaccumulation potential scores as for human exposure potential). Each factor is assigned a score based on chemical data, and then summed to create the overall PBT score. Increasing quantities of a chemical are assumed to increase the associated risks. To incorporate quantity into the prioritization process, the WMPT allows users to input quantities of chemicals, which the WMPT converts to mass scores. Mass scores are added to PBT scores to generate overall scores. Overall scores provide the most comprehensive method of prioritizing chemicals. Quantity information can be entered for chemicals in selected waste streams, chemicals released to specific media, or chemicals purchased.

Analysis of DOE TRI Data Using the WMPT

DOE facilities that exceed certain manufacture, process, or use thresholds are required to annually report quantities of chemical releases and transfers to the Toxic Release Inventory (TRI). The TRI is sometimes used to help assess the potential risks a facility poses to nearby communities. Using TRI information reported by DOE facilities for reporting year 1995, the WMPT was used to develop overall PBT scores (including mass) for the 23 chemicals that were reported that year. The top four PBT scores were: lead, benzene, Freon 113 and ethylbenzene. This ranking differed from the top four chemicals based only on the largest quantities reported to the TRI, which were: methanol, ammonia, xylene and chlorodifluoromethane. In deciding where limited waste minimization budgets could be put to their best use, these ranking differences suggest that the WMPT could potentially be useful in helping DOE facilities achieve greater overall risk reduction than would otherwise be accomplished by prioritizing just on the basis of quantity of chemical released.

Copies of the software package and related documents may be obtained by calling the EPA RCRA/Superfund/EPCRA Hotline at (800) 424-9346, and are available in electronic format on the Internet *(http://www.epa.gov/epaoswer/hazwaste/minimize).* For further information or questions related to the WMPT software package, contact the EPA RCRA/Superfund/EPCRA Hotline or Jane Powers, DOE Office of Environmental Policy and Assistance, EH-41, at (202) 586-7301, fax (202) 586-3915, or e-mail *(jane.powers@eh.doe.gov).*

Office of NEPA Policy and Assistance Makes Presentation on "Scoping" at Duke University

On April 16, 1998, Lee Jessee from the Office of NEPA Policy and Assistance made a presentation on using Web-based technology to enhance National Environmental Policy Act (NEPA) scoping at Duke University's Nicholas School on the Environment. The presentation was part of a course entitled, "Making the NEPA Process More Efficient: Scoping and Public Participation,"was sponsored by the President's Council on Environmental Quality.

Scoping is an early and open process for determining the issues to be addressed in environmental impact statements. The course provided graduate and undergraduate students from Duke University, as well as NEPA practitioners from Federal agencies, with new skills to develop a more effective scoping process that saves agencies money and ensures full public participation in decisionmaking.

The Department's NEPA Web site *(http://tis.eh.doe.gov/nepa/),* activated in October 1993, was the first full-text source of agency-specific NEPA information on the Web. The DOE NEPA Web uses some of the latest Web technologies (Java applets, database connectivity, and search system) to provide the responsiveness needed for closer Federal coordination and to enhance opportunities for public involvement in Federal planning and decisionmaking.

For further information about the DOE NEPA Web, contact Lee Jessee, Office of NEPA Policy and Assistance, EH-42, at (202) 586-7600; fax (202) 586-7031; or e-mail *(lee.jessee@eh.doe.gov).*

Office of Operating Experience Analysis and Feedback Hosts Russian Engineers

The Office of Operating Experience Analysis and Feedback (EH-33) recently hosted two Russian engineers, offering them an opportunity to learn about how the Department reports and analyzes occurrences across the complex. Dr. Andrei Lavrinovitch, State Inspector for the Department of Nuclear and Radiation Safety of Fuel Cycle Facilities, and Alexander Sapozhnikov, Head of the Inspection Division, Department for Supervision on Research Reactors Nuclear and Radiation Safety, from Russia's Federal Nuclear and Radiation Safety Authority, GOSATOMNADZOR (GAN), spent a month working with EH-33 staff. GAN is a Federal agency in the executive branch of the Russian government that regulates safety in the use of nuclear energy, nuclear materials, radioactive substances, and products based on radioactive substances and establishes safety criteria regulations. The Office of Nuclear Energy, Office of International Nuclear Safety, arranged for the visit through the DOE/GAN Cooperative Program on Event Reporting and Analysis.

Alexander Sapozhnikov and Andrei Lavrinovitch accept Honorary Operating Experience Engineer Certificate.

Jeannie Boyle, of the Occurrence Reporting Program, Alexander Sapozhnikov, and Andrei Lavrinovitch discussed how ORPS events are reported and analyzed.

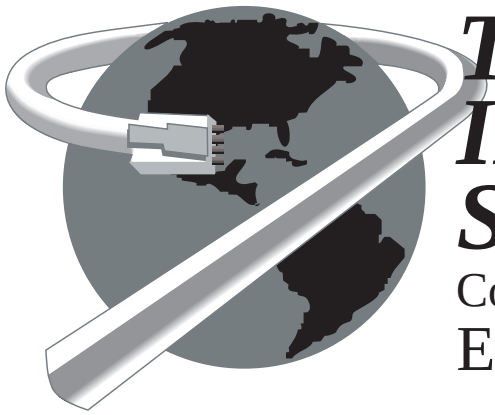
Alexander and Andrei worked primarily with Jeannie Boyle of the Occurrence Reporting Program and Jim Snell of the Operating Experience Program during their visit. They learned how events across the complex are analyzed and the procedures in place for reporting and analyzing them. The two GAN representatives also received hands-on training in using the Occurrence Reporting and Processing System (ORPS) and participated in a number of event analyses. They reviewed daily occurrence reports from ORPS, used computers to implement event analysis techniques, searched the Internet for pertinent information, and participated in the Operating Experience Weekly Summary production process from initial event reviews through final publication.

Alexander Sapozhnikov, Head of the Inspection Division, Department for Supervision on Research Reactors Nuclear and Radiation Safety

Alexander and Andrei will apply much of what they learned at DOE to their programs at GAN. Jim Snell reported that the two returned to Russia "loaded down with policies, procedures, all kinds of reference material and articles, and a specially prepared CD (complete with the Russian Federation logo) that has many tools to help their agency increase the safety of nuclear energy use in Russia." Jim also noted that GAN invited him and other DOE staff members to Moscow, where they will participate in regulatory discussions centered on evaluating operating information.

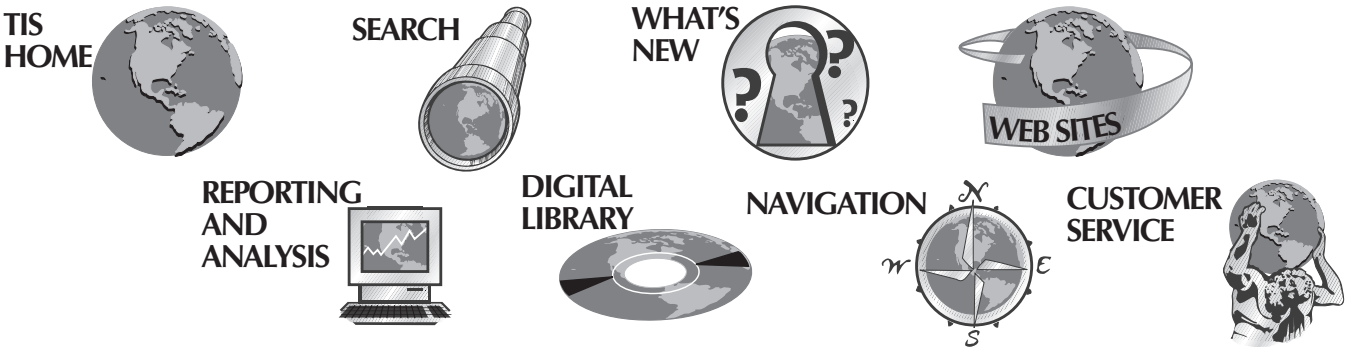
Dr. Andrei Lavrinovitch, State Inspector for the Department of Nuclear and Radiation Safety of Fuel Cycle Facilities

The visit by the two Russians provided an exciting opportunity for DOE and GAN to learn more about each other's activities. All those who participated in this joint venture hope that it will be merely one step in a continuing cooperative relationship between the two agencies. If you are interested in learning more about this effort, contact Jim Snell, Office of Operating Experience Analysis and Feedback, at (301) 903-4094, or e-mail Jim.Snell@eh.doe.gov (or Jeannie Boyle, Office of Operating Analysis and Feedback (301) 903-3393, e-mail *(eugenia.boyle@eh.doe.gov).*



TECHNICAL INFORMATION SERVICES

Connecting the World of Environment, Safety and Health



The new, redesigned ES&H Technical Information Services Web Site will soon become our Home Page. It is being designed to be simple, fast and easy to use.

The site will have a new, contemporary look with graphic links to six areas that offer all the web sites, documents, special features and related hyperlinks that environment, safety, and health professionals need.

If the new service does not meet your professional needs, the Customer Service area includes an on-line Comment Form for your feedback, questions, requests, and suggestions. Links to information about the ES&H Helpline, on-line forms and many new, automated features are also found in the Customer Service area.

The redesigned TIS Web Site will offer another great new feature: the Digital Library, which will contain document collections covering regulations, publications, and each functional area within EH. The Library will be simple to use and well-organized for easy document retrieval.

The Web Site will also provide links to all the environment, safety, and health web sites that most of us use or will want to use.

There is also a new Search feature that will allow full text searching of the entire Site or any part of it. You can search the Digital Library, one or several of its document collections, the entire TIS Web Site, or any of the TIS hosted web sites such as:

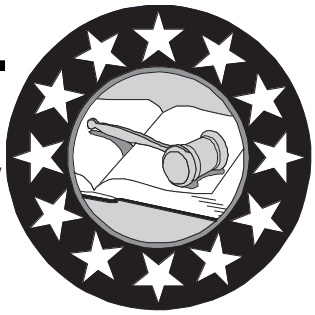
- Integrated Safety Management
- NEPA (National Environment Protection Act)
- Chemical Safety Program
- Chronic Beryllium Disease Prevention Program
- Worker Health and Safety
- Voluntary Protection Program
- Operating Experience Analysis

Council on Environmental Quality Issues Environmental Justice Guidance

The Council on Environmental Quality (CEQ) recently issued Environmental Justice Guidance under the National Environmental Policy Act (NEPA). The Guidance first discusses the general tenets of Executive Order 12898 *(Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, February 1994)* and the Order's relationship to the NEPA process. The Guidance then presents general principles for considering environmental justice under NEPA and recommendations for specific phases of the NEPA process. The Guidance notes that specific consideration of impacts on low-income or minority populations integrated with the rest of the NEPA review may identify significant impacts that would otherwise be overlooked. The Guidance also suggests that agencies should determine the presence or absence of low-income or minority populations before the NEPA scoping process, then use enhanced communication strategies to reach and inform such populations and to consult with them about reasonable alternatives and possible mitigation measures.

The CEQ Guidance is to be applied to the NEPA process prospectively. The DOE Office of NEPA Policy and Assistance expects to distribute DOE-specific NEPA guidance on environmental justice, consistent with the CEQ guidance, by the end of the fiscal year (after coordination with the DOE NEPA community and external stakeholders). For further information or a copy of the CEQ Guidance, contact Stephen Simpson, Office of NEPA Policy and Assistance, EH-42, at (202) 586-0125; fax (202) 586-7031 or e-mail *(stephen.simpson@eh.doe.gov).*

Department's NEPA Program Called Exemplary During Congressional Oversight Hearing



At a March 18, 1998, Congressional oversight hearing on problems and issues with the National Environmental Policy Act (NEPA), witnesses both within and outside government referred to DOE's NEPA program as exemplary. The hearing was held by the House of Representatives' Committee on Resources, chaired by Don Young (Alaska).

In opening statements, Kathleen McGinty, Chair, Council on Environmental Quality, emphasized NEPA's importance in integrating economic, social, and environmental values. She noted how NEPA implementation has helped agencies avoid mistakes. She referred to former DOE Secretary, Admiral Watkins, as having told Congress, "Thank God for NEPA," with regard to his decision to defer selection of a costly tritium production technology—a technology he found to be wrong for the country despite many pressures to choose it.

Most of the witnesses from public and private interest groups stated that NEPA itself was not a problem but that its implementation by certain agencies needed improvement. The Director of the Reason Public Policy Institute, Lynn Scarlett, however, singled out DOE as having successfully reinvented NEPA; particularly in setting, tracking, and reporting cost and time goals for the NEPA process. She noted that the common wisdom that "what gets measured gets done" is accurate in the case of DOE.

Several witnesses suggested that Federal implementation of NEPA needed greater involvement of state and local governments. In this regard, a bill was introduced in the Senate in September 1997 under which states and counties with jurisdiction by law or special expertise would automatically be cooperating agencies in the preparation of NEPA documents. Witnesses also urged better coordination among the Federal agencies that might be involved in a proposed action, particularly in identifying requirements for projects, eliminating duplication of environmental analyses, and consolidating approvals.

For further information on the Hearing or on DOE's NEPA process, contact Carolyn Osborne, Office of NEPA Policy and Assistance, EH-42, at (202) 586-4596, fax (202) 586-7031, or e-mail *(carolyn.osborne@eh.doe.gov).*

NEPA Compliance Officers Meeting Held in March

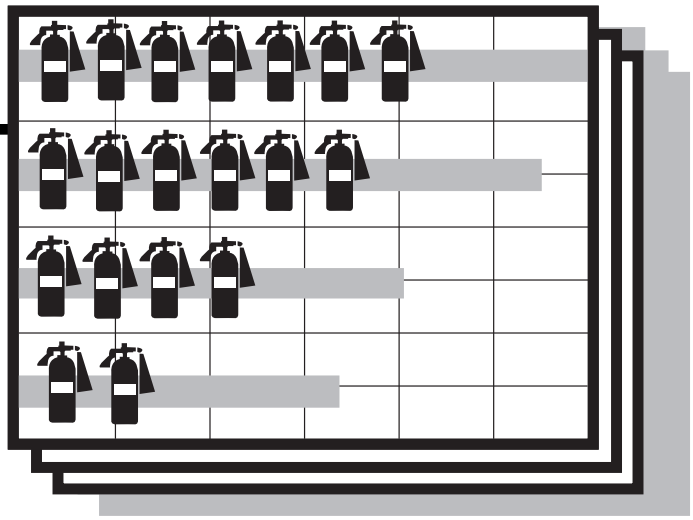
Field and Program National Environmental Policy Act (NEPA) Compliance Officers (NCOs) and staff from the Office of NEPA Policy and Assistance and the Office of Assistant General Counsel (GC) for Environment met in Washington D.C. on March 26 and 27th. Peter Brush, Acting Assistant Secretary for Environment, Safety and Health (EH), opened the meeting by saluting the NCOs as key participants in DOE's NEPA Program, telling them that "NEPA is no longer a military campaign to be imposed on the Department; it has become a way of life." He credited the NCOs as a "major force in streamlining our NEPA compliance."

In discussions that followed during the day and a half meeting, NCOs shared ways of effectively carrying out their responsibilities. The NCOs and EH and GC staff discussed how to efficiently record categorical exclusions. Meeting participants shared approaches for effective interaction with managers and project officials and identified NEPA training needs for their Offices. They also described their experiences with integrating NEPA reviews with other environmental reviews and consultations, such as the Endangered Species Act, the National Historic Preservation Act, and state environmental policy acts. NCOs who have tasks under DOE-wide NEPA support contracts expressed satisfaction that the expected benefits—reduced time and costs—are now materializing.

The NCOs and the Office of NEPA Policy and Assistance will continue to seek ways to improve the DOE NEPA Program. They are planning a wider DOE NEPA Community Meeting to be held at the Nevada Operations Office during the week of October 13, 1998.

For more information on the March meeting or the upcoming NEPA Community Meeting, contact Jim Sanderson at (202)586-1402 or e-mail *(jim.sanderson@eh.doe.gov).*

Fire Safety Committee Establishes 1998 Agenda



Three fire safety initiatives were put on the Calendar Year 1998 agenda by the Fire Safety Committee. These initiatives address the Committee's agreed-upon "needs" relating to effective fire safety and emergency services program management across the complex.

Revising the set of Committee-endorsed performance measures is the first initiative. The Chairman distributed a draft set of performance measures for review and comment. The final set will be presented for Committee approval at the annual DOE/Contractor Fire Safety Workshop in Idaho Falls, ID, on June 8-12, 1998. Historically, the Department has measured fire losses, fire loss rates, sprinkler system performance, and recurring fire protection program costs. The Committee believes these measures are no longer completely effective as tools to judge the management of program activities.

The second initiative is the Committee's plans to encourage sites to adopt revised (more liberal) fire protection system inspection testing and maintenance requirements. These new requirements are similar to those already implemented at Hanford, Idaho National Engineering and Environmental Laboratory, and three DOE Oak Ridge sites. In some instances, fire protection system performance has improved with the adoption of the more liberal (less than required by the National Fire Protection Association) criteria. A draft guidance document containing the essential elements of the above-noted site programs has been developed. The final draft will be presented for Committee approval at the June workshop.

The third initiative is the development of a DOE Fire Protection "Summary Status Paper." It will reflect the results of a year-end (1997) Committee review of the program's overall status. To continue the Fire Safety Program's observed successes, the Committee believes DOE should reaffirm management commitment to fire safety, call for improved management systems, ensure adequate staffing of qualified and trained fire safety and emergency services professionals, and establish documented and institutionalized site fire safety programs that conform to industry and DOE fire safety criteria. The Committee endorses the above objectives as the principal Departmental attributes to ensure DOE's Fire Safety Program's future success.

For more information on DOE's Fire Safety Program or its 1998 initiatives, contact Dennis Kubicki (EH-51) at (301) 903-4794 or e-mail at *dennis.kubicki@eh.doe.gov.*

Decontaminating & Decommissioning Worker Involvement Lessons Learned Study

A lessons learned and good practices study involving the Idaho National Engineering and Environmental Laboratory (INEEL) decontamination and decommissioning workers was recently completed. The study was based on October 1997, field interviews with INEEL hands-on workers and management personnel. It details the importance and benefits derived from worker involvement on a routine, daily basis, utilizing an integrated safety management system. Following are five core functions of this system: plan work, analysis of hazards and work controls, work performance, and feedback methods.

INEEL workers listed their top three hazards as (1) the need to identify uncertain and unknown hazards, (2) falling objects and actual worker falls, and (3) the operation of heavy equipment-related hazards. Workers expressed concern about asbestos contamination, hitting live utilities, and acquiring hanta virus while performing decontamination and decommissioning work. Lessons learned include minimization of worker safety and health risks and solicitation for worker involvement at the earliest stages of project planning.

Other study conclusions included the following:

- Workers previously employed during past facility operations should be interviewed regarding past facility operations, hazards, and past incidents.
- Job hazard analysis and pre-job briefings increase hazard awareness and recognition.
- Hands-on training is a necessary supplement to classroom training.
- Worker safety and performance may be compromised when subcontractors do not adhere to the prime contractor's safety procedures.
- Post-job reviews are necessary to capture safety-related lessons learned and apply them to similar site activities.

The INEEL facility disposition program was chosen because of its accomplishments in deactivating contaminated facilities and decommissioning and dismantling surplus facilities ahead of schedule and under cost. The study was a collaborative effort between EH's Office of Worker Health and Safety, Idaho Operations Office (DOE ID); Lockheed Martin Idaho Technologies Company; and the Office of Environmental Restoration, Northwest Program Office.

For more information about the Worker Involvement Study or to acquire the study report, please contact either Andy Mikkola (DOE ID) at (208) 526-0725, Tony Kluk (EM-44) at (301) 903-3744, or George Detsis (EH-53) at (301) 903-1488.

EH-5 News Briefs

A Physiologically Based Pharmacokinetic (PBPK) Breath Analyzer was demonstrated at the Toxic Substance Control Act Incinerator Facility at Oak Ridge, Tennessee, on April 13-24, 1998. This was the first extensive testing of the analyzer as a viable system to monitor for volatile uptakes.

Douglas E. Steffan, Project Director, Morrison Knudsen, (left) receives the DOE-VPP Merit certificate from Peter Brush, Acting Assistant Secretary for Environment, Safety and Health.

Peter Brush, Acting Assistant Secretary for Environment, Safety and Health, presented a **DOE-VPP Merit flag and certification** to Doug Steffan, Project Manager for MK Ferguson/Jacobs Engineering at the Weldon Spring Site Remedial Action Project (WSSRAP) on April 9, 1998. WSSRAP met all recognition requirements during a November 17-21, 1997, onsite review by the DOE-VPP team.

DOE and Fernald participated in a working meeting to initiate a **worker qualifications pilot project** on March 12-13, 1998. Weekly meetings are held to determine how to improve efficiency and reduce liability in an increasingly transient workforce.

A Worker Health and Safety Policy Web Site was designed and developed to assist the DOE complex in the administration of effective worker safety and health programs. The site is available at *http://tis.eh.doe.gov/whs/policy/* and features What's New, Regulatory Authority, Respirator Protection Program, Points of Contact, and Related Sites. The Respirator Protection Program pages specifically address the revised OSHA respiratory protection standard, 29 CFR 1910.134, and how it will impact DOE sites.

DOE Guide 440.1-3, **"Occupational Exposure Assessment,"** is available on the Office of Worker Health and Safety Beryllium Web Site at *http://tis.eh.doe.gov/be/.* For the past nine months, the field has used the guide as a working draft. It describes best practices for monitoring and assessing airborne hazards, including beryllium. "Occupational Exposure Assessment" is now in final form and provides guidance for monitoring, assessing, and controlling workplace hazards.

Responding to a request from DOE Richland Operations Office, EH-5 staff members, Dennis Kubicki and Gerald Meyers, provided **assistance to review a Hanford Fire Department high/low angle rescue training plan.** The plan was developed to justify the resumption of rappelling and other related training as the result of a moratorium imposed after a 1995 accident at the Savannah River Site. Resumption of training by fire department personnel is necessary to maintain firefighter certification.

Weldon Spring VPP Stering committee hoist the DOE--VPP Merit Site flag.

Implementing ISM at D&D Facilities

Integration of Environment, Safety and Health Into Facility Disposition Activities, Technical Standard DOE-STD-1120-98, was developed to identify and clarify deactivation and decommissioning (D&D) requirements. The Standard supports Integrated Safety Management, as defined in DOE P 450.4, *Safety Management System Policy,* and DOE Order 430.1, *Life-Cycle Asset Management.* EH's Offices of Worker Health and Safety and Nuclear and Facility Safety co-sponsored the Standard.

Environment, safety and health (ES&H) guidance is provided on D&D work planning; hazard analysis and controls; and work performance, feedback, and improvement. Work planning guidance covers ES&H project resource planning integration, ES&H requirements identification, teaming and worker involvement in approaching work planning, performance expectations and criteria, facility and task interface activities, and strategies for managing subcontractors. Hazard analysis and controls guidance includes resolution of multiple DOE and external requirements through integrated hazard analysis, interface between facility hazard and task (job) hazard analyses, worker and facility safety controls, and safety documentation grading. Work performance, feedback, and improvement provides implementation guidance on readiness reviews for nuclear and nonnuclear D&D activities, change management due to uncharacterized hazards, and work monitoring and self-assessments.

The Technical Standard will be released in spring 1998. Orientation and awareness workshops will be held during 1998 and 1999. For more information on D&D activities, contact Tony Eng at (EH-53) at (301) 903-4210 or e-mail at *tony.eng@eh.doe.gov.*

Occupational Medicine Meeting

The Office of Occupational Medicine and Medical Surveillance (EH-61) will be holding its annual Department of Energy (DOE) Occupational Medicine Meeting this year in Washington, D.C., from July 19-22, 1998. The meeting will be held at the Park Hyatt Hotel in Washington, D.C., which is located on the corner of 24th and M Street, N.W.

The focus for this year's meeting is on secondary prevention. Secondary prevention is the area of occupational medicine dealing with early detection of illness by monitoring workers who are at risk. Beryllium worker monitoring at DOE is a prime example of the importance of secondary prevention. The meeting will address key approaches to secondary prevention. Speakers include several internationally known experts in occupational medicine, such as Dr. Paul Brandt-Rauf from Columbia University. Keynote speakers include Dr. Robert McCunney, the president elect of ACOEM; Dr. Larry Mohr, the White House Physician for Presidents Ronald Reagan, George Bush, and Bill Clinton; and (tentatively) Dr. David Satcher, the U.S. Surgeon General. The meeting will also feature several tours and include separate poster and display sessions relating to secondary prevention.

The meeting is open to the public, but you must register to attend. For more information on the agenda, see the following Internet address: *http://tis.eh.doe.gov/med/;* and to register, use *http://tis.eh.doe.gov/med/register.* For more information about this annual meeting, please contact Dr. John P. Peeters, EH-61, at (301) 903-5902 or e-mail *(john.peeters@eh.doe.gov).*

50th Annual State-of-the-Art Conference "Bridging Canyons to the 21st Century"

American College of Occupational and Environmental Medicine presents its 50th Annual State-of-the-Art Conference, "Bridging Canyons to the 21st Century" on October 18-22, 1998. It will be held at The Pointe Hilton Resort at Tapatio Cliffs, Phoenix, Arizona.

- Opening Session speaker, Joseph L. Lyon, MD, Chief, Public Health Division; Professor, Department of Family Practice and Preventive Medicine, School of Medicine, University of Utah.

- Gehrmann Lecturer- J. Steven Moore, MD, Professor, College of Engineering, Texas A&M University; Co-director, National Science Foundation Industry/ University Cooperative Research in Ergonomics.

Open to all occupational health professionals, the conference will help attendees approaching the new millennium to integrate old and new delivery systems, practice settings, technologies, and treatment modalities. It will feature postgraduate seminars, concurrent scientific sessions, and special seminars. Technical exhibits and a guest program are included. Six 2-day preconference professional development courses also will be offered.

The American College of Occupational and Environmental Medicine (ACOEM) is an international medical society of 7,000 occupational medicine physicians who champion the health and safety of workers, workplaces, and environments.

For more information, contact ACOEM, 55 W. Seegers Rd., Arlington Heights, IL 60005 3919; phone 847-228-6850, Ext. 184; fax 847-228-1856; or visit the ACOEM website at *http://www.acoem.org.*

Announcement of NEPA Community Meeting

The Office of NEPA Policy and Assistance is planning a NEPA Community Meeting to be held October 14-15, 1998, at the Nevada Operations Office's new support facility in North Las Vegas. Invitees will include NEPA Compliance Officers, Document Managers, Field Counsel, and other NEPA contacts.

Topics on the preliminary agenda include but are not limited to: (1) lessons learned on environmental impact statements; (2) cumulative effects analysis; (3) guidance on categorical exclusions; and (4) experience under the nationwide NEPA contract. Arrangements will be made for tours of the Nevada Test Site or Yucca Mountain (or both) either before or after the meeting.

Upcoming Meetings Supported by the Office of International Health Programs (EH-63)

In collaboration with the Radiation Protection Research Unit of the European Commission, the Office of International Health Programs is sponsoring two meetings in 1998.

- First International Seminar on RADIATION AND THYROID CANCER July 20-23, 1998, in Cambridge, United Kingdom. For more information, access *http://tis.eh.doe.gov/ihp/conferences/radiation.pdf.*

- International Conference on DIAGNOSIS AND TREATMENT OF RADIATION INJURY August 31- September 3, 1998, in Rotterdam, The Netherlands. For more information, access http://tis.eh.doe.gov/ihp/conferences/radiation_conf.pdf.

Office of Environment, Safety and Health
EH-72, 270 CC
U.S. Department of Energy
19901 Germantown Road
Germantown, Maryland 20874-1290